



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/786,990

06/15/2001

Masahide Onishi

2001\_0219A

1129

513

7590

09/01/2009

WENDEROTH, LIND & PONACK, L.L.P.

1030 15th Street, N.W.,

Suite 400 East

Washington, DC 20005-1503

EXAMINER

FAULK, DEVONA E

ART UNIT

PAPER NUMBER

2614

MAIL DATE

DELIVERY MODE

09/01/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/786,990	<b>Applicant(s)</b> ONISHI ET AL.	
	<b>Examiner</b> DEVONA E. FAULK	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/15/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,370,253..

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims recite similar subject matter that are within the same scope.

US 6,370,253	09/786990
1. An audio reproducing apparatus comprising:  (a) a power <del>amplifier</del> for amplifying an input signal;  (b) a <del>speaker</del> for reproducing an output	1. A sound reproduction apparatus comprising:  a power amplifier for amplifying input signal;  a speaker unit for reproducing output

<p>signal from said power amplifier, said speaker being mounted to a baffle;</p> <p>(c) detecting means for detecting a movement of a voice coil disposed in said speaker;</p> <p>(d) a microphone disposed around said speaker;</p> <p>(e) an amplifier for amplifying an output signal supplied from said detecting means;</p> <p>(f) a bandwidth-passing-means for an output supplied from said amplifier;</p> <p>(g) a phase shifter for receiving an output signal from said bandwidth-passing-means;</p> <p>(h) adding means for adding electrically an output from said phase shifter and a lower frequency component of an output signal, including a noise around and a signal reproduced by said speaker, from said microphone;</p> <p>(i) converting means for converting an ac signal supplied from said adding means into a dc signal; and</p> <p>(j) control means for adjusting automatically a magnitude of the input signal responsive to the dc signal supplied from said converting means for preventing a reproduced sound from being masked with noise around said speaker, said control means disposed on an input side of said amplifier.</p> <p>2. The audio reproducing apparatus as defined in claim 1 wherein said detecting means is a detecting coil disposed at a bobbin wound with a voice coil of said speaker.</p> <p>3. The audio reproducing apparatus as</p>	<p>signal of the power amplifier, mounted on a baffle;</p> <p>a first microphone provided outside a dust cap of speaker unit;</p> <p>a second microphone provided inside the dust cap of speaker unit;</p> <p>a first filter that receives output signal of said first microphone containing ambient noise and reproduced signal of said speaker unit, and</p> <p>outputs a signal of certain specific pass band;</p> <p>a second filter that receives output signal of said second microphone,</p> <p>and outputs a signal of certain specific pass band;</p> <p>an adder for adding output signals from said first filter and said second filter;</p> <p>conversion means for converting AC signal from the adder into DC signal; and</p> <p>control means provided at the input stage of said power amplifier,</p> <p>said control means automatically controlling the strength of said input signal in accordance with DC signal delivered from said conversion means</p> <p>so that the sound reproduced by said speaker unit is not masked by ambient noise around said speaker unit.</p> <p>2. The sound reproduction apparatus of</p>
--	---

defined in claim 1 wherein said bandwidth-passing-means comprises a low-pass filter and a high-pass filter.

4. The audio reproducing apparatus as defined in claim 1, further comprising a low-pass filter disposed between an input side of said adding means and an output side of said microphone.

5. The audio reproducing apparatus as defined in claim 1, wherein said converting means is a rectifying circuit.

6. The audio reproducing apparatus as defined in claim 1, wherein said control means is a gain-control-circuit for controlling an amplitude of the input signal responsive to the dc signal supplied from said converting means.

7. The audio reproducing apparatus as defined in claim 1 wherein said microphone is disposed ahead of said speaker.

8. The audio reproducing apparatus as defined in claim 1 wherein said microphone is disposed behind said speaker.

9. The audio reproducing apparatus as defined in claim 2 wherein said bandwidth-passing-means comprises a low-pass filter and a high-pass filter.

10. The audio reproducing apparatus as defined in claim 2 further comprising a low-pass filter disposed between an input side of said adding means and an output side of said microphone.

claim 1, wherein the first filter is a primary low-pass filter.

3. The sound reproduction apparatus recited in claim 1 wherein the sound filter is a primary high-pass filter.

4. The sound reproduction apparatus of claim 1, wherein the first microphone is attached and fixed on a outer surface of the dust cap.

5. The sound reproduction apparatus of claim 1, wherein the second microphone is attached and fixed on a inner surface of the dust cap.

6. The sound reproduction apparatus of claim 1, wherein the first microphone is disposed opposing to the dust cap with a certain predetermined clearance.

7. The sound reproduction apparatus of claim 1, wherein the second microphone is disposed opposing to the dust cap with a certain predetermined clearance.

8. The sound reproduction apparatus of claim 1, wherein the first microphone and the second microphone are disposed on the axial line of the dust cap opposing face to face with the dust cap in the middle.

9. The sound reproduction apparatus of claim 1, wherein the conversion means is a rectifier circuit.

10. The sound reproduction apparatus of claim 1, wherein the control means is a variable gain controller which controls an amplification

	degree of the input signal in accordance with the DC signal delivered from the conversion means.

***Claim Objections***

3. Claim 12 is objected to because of the following informalities: Claim 12 should be numbered claim 11. The original claims only had 10 claims, therefore the new claim should be numbered 11 not 12. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3 and 12 recites the limitation "wherein the sound filter" in line 1. There is insufficient antecedent basis for this limitation in the claim, particularly the "sound filter" language.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEVONA E. FAULK whose telephone number is (571)272-7515. The examiner can normally be reached on 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devona E. Faulk/  
Primary Examiner, Art Unit 2614